

## Claims

1. A cultivar of *Phyllanthus amarus* 'CIM-Jeevan', producing high amount of herb, phyllanthin and hypophyllanthin, wherein said cultivar is developed through  $\gamma$ -irradiation of superior germplasm, having following characters:
  - a. the said plant produces high amount of herbage yield ranging between 1.0-1.15 kg per sqm fresh total plant herb,
  - b. the said plant possesses high vegetative erect growth with a height ranging between 60 to 65 cm,
  - c. the said plant has distinct molecular profile established by Random Amplified Polymorphic DNA (RAPD),
  - d. the said plant has leaves with following characteristics,
    - Color: greenish leaves with upper surface (127A) and lower surface (136D),
    - Surface: Smooth,
    - Shape: elliptic oblong to obvate,
    - Margin: ciliate,
    - Tip: obtuse,
    - Base: Obtuse,
    - Petiole length: 0.3-0.7 mm,
    - Length: 6 to 10 mm, and
    - Width: 4 to 5 mm
  - e. the said plant has stem with following characteristics,
    - Terete,
    - Smooth,
    - Green (138C)
    - Young parts are rough
  - f. the said plant has flowers with perianth having the following characters:
    - Lobes 5, sub-equal, elliptic or oblong, Disc 5 roundish
    - Stamens: 3, free, filaments connate in a column, anther sessile
    - Style: 3, spreading, stigma bi-fid, divergent
  - g. the said plant has fruit with the following characters:
    - a. Capsule,
    - b. Obvate-rounded,
    - c. Yellow green group (144 D)

- h. the said plant has seeds with the following characters:
  - a. Triangular,
  - b. longitudinal ribs,
  - c. transverse striate on back,
  - d. weight of 1000-seed: about 1.8g.
- i. the said plant produce phyllanthin ranging between 0.70-0.77% in dry herb ,
- j. the said plant produce hypophyllanthin ranging between 0.32-0.37% in dry herb,
- k. the said plant produce average dry seed per plant of about 4.1 in grams,
- l. the said plant produce average dry leaves per plant of about 5.75 in grams,
- m. the said plant produce average dry biomass per plant of about 11 in grams,
- n. the said plant produce average fresh biomass per plant at harvest of about 55 in grams,
- o. the said plant shows seed germination of about 90%, and
- p. the said plant is an annual herb.